

Liège, le January 16, 1958.  
1, rue des Bonnes-Villes

*B. Lederberg*  
Prof. J. Lederberg  
Dept. of Genetics  
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MADISON 6 (Wisconsin)

Dear Dr. Lederberg,

Thank you very much for your letter dated December 15, which arrived when I was away. I shall answer your different questions in order:

1.- I have no reprints from the Ciba Symposium but I am sending by ordinary mail some other reprints.

2.- I am sending by air-mail some K.12 made colicinogenic for different colicins (all are derived from Wollman strain 112-12 which is cystin-histidine deficient, gal.4-, T.1r, S.r, and non lysogenic; any non colicinogenic K.12 may be used as indicator).

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TR.24 = 112-12 <sup>made</sup> col. by CA.18 and producing colicin B  
TR.25 = 112-12 " " K.235 " " " K  
TR.27 = 112-12 " " TR.10 " " " I + E(2)  
TR.28 = 112-12 " " K.30 " " " E(1)  
12-9 = 112-12 " " K.9 " " " I  
12-94 = 112-12 " " K.94 " " " V

3.- ~~The~~ The problem has not been studied any further. When both strains are F- there is no transfer of colicinogenicity but if the colicinogenic strain is made F+ then the transfer occurs. If the colicinogenic strain is F- and the other F+ there is a transfer but it is as yet not decided if it is a transfer from F- to F+ or if there is first a transfer of F to the colicinogenic strain and then transfer of colicinogenicity from F+ to F+.

4.- Your suggestion of using the symbol of plasmids for the colicinogenic factors is quite valuable. I found it perhaps a little premature for 2 reasons:

a) I think that colicinogenic factors are more virus-like than plasmid-like.

b) It would be quite coherent for the colicinogenic factor governing production of colicin E (1) but other results are obtained with ~~of~~ other colicins that I am now studying. Particularly in the case

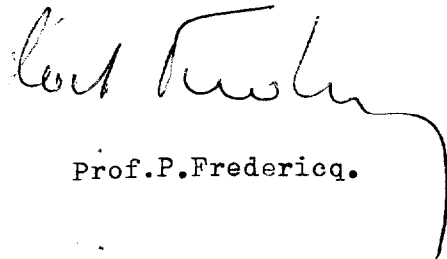
of colicin I there are some lethal effects which seem to be linked to the selected markers used, and to interfere with the <sup>2</sup>transfer of colicinogenicity or immunity to it.

5.- I have no indication of such a phenomenon because it is difficult (though possible) to distinguish immune cells from cells which have lost the receptor.

6.- Thank you very much for your proposal to come as an honored guest of your laboratory. In fact I am coming to the States next March to stay 3 months at Cold Spring Harbor. I shall travel during June and hope to be able to visit you on my way. I shall write to you about it. As regard my coming to your laboratory, it is very appealing to me and I shall be glad to discuss it with you. However I do not think that I could come before 1960 or 1961 and in any case it would be difficult for me to be absent more than 3 or 4 months.

7.- I am sending strain CA.46 with the other strains.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Prof. P. Fredericq", with a long horizontal flourish extending to the right.

Prof. P. Fredericq.